

Intel® Active Monitor—Thermal Assurance for End Users

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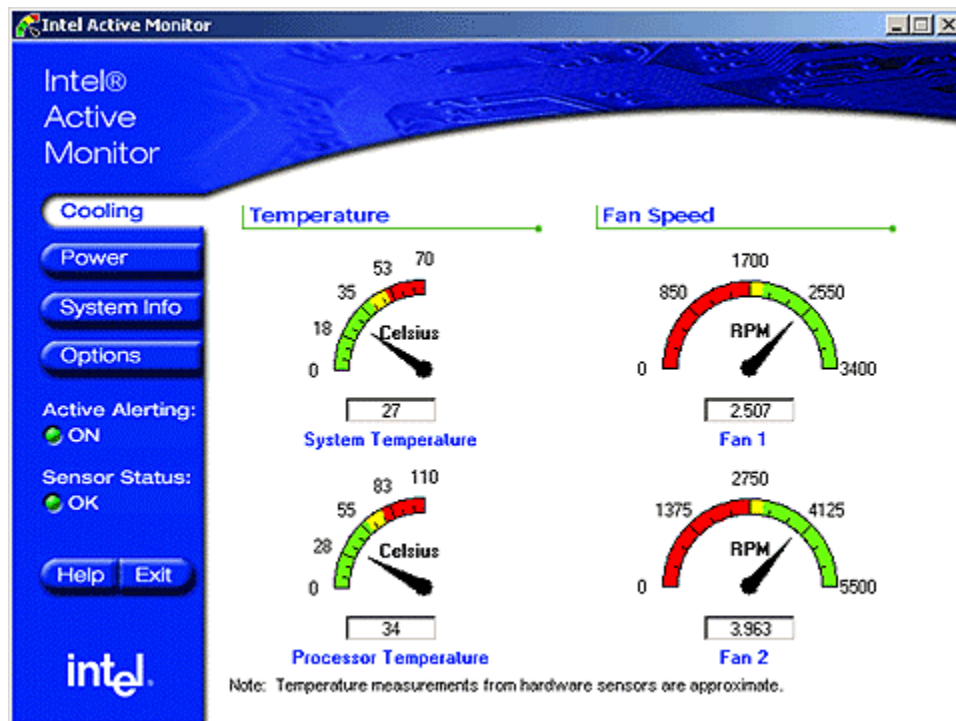
Overview

Tech enthusiasts and power users have long known that faster systems require increasingly better cooling solutions. As processors cross the gigahertz barrier, however, even average PC users are becoming aware of thermal issues. One way that system integrators can reassure their customers is to offer solutions that educate and help protect against failures. The Intel® Active Monitor, a new alerting utility for Intel® Desktop Boards, monitors critical parameters and displays important system information. It can provide extra assurance for end users and even lower support costs for integrators.

Intel Active Monitor

Intel Active Monitor is an Intel developed utility that monitors a system's vital signs. It warns users if their processors or systems begin running too hot or if fans or power supplies are failing. The utility takes advantage of specialized hardware sensors on new Intel Desktop Boards, based on Intel® 810, 815, and 850 chipsets, to provide a virtual "look inside" the system.

The Intel Active Monitor resides neatly on the system tray, using less than 1 percent of system resources. If queried by the user, an attractive GUI pops up. Status "gauges" display processor and system temperatures, power supply voltages, and cooling fan speeds. The side panel shows the sensor and alert status as well as providing access to system information and options. See Figure 1.



An Ounce of Prevention

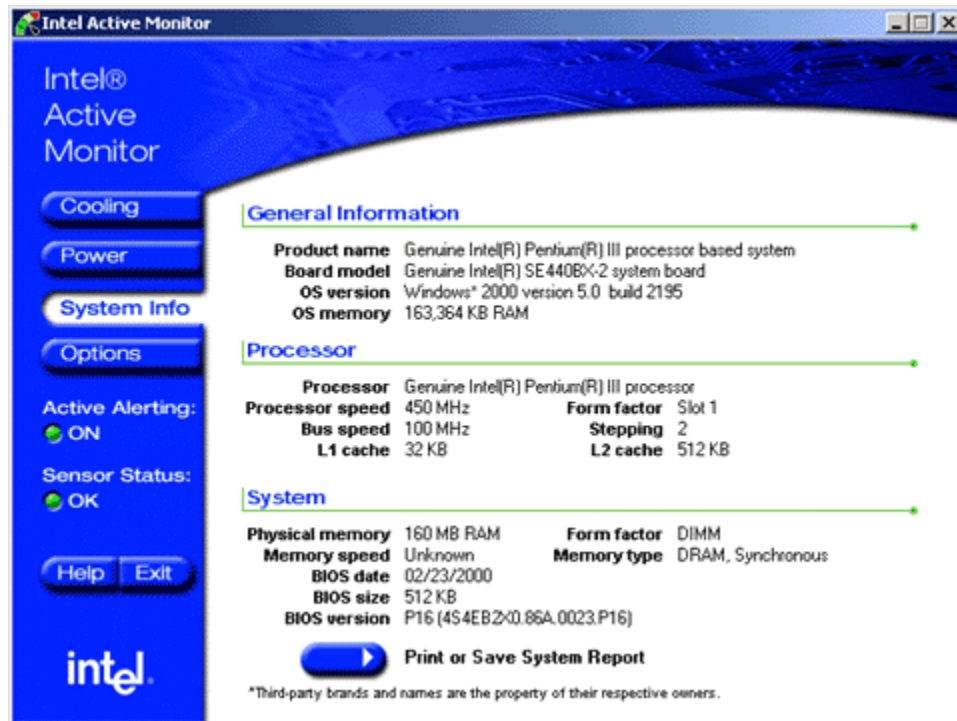
Should a failure actually occur, the Intel Active Monitor alerts the user and offers guidance. The user can choose several different styles of alerts: a pop-up window, a blinking “red” tray icon, an audio alert or all three. The GUI takes the user to the gauge that caused the alert. It directs the user to a list of possible causes and recommended solutions through its context-sensitive help. See Figure 2.



The Intel Active Monitor can also serve as a valuable post-sales support tool and can even lower support costs. A support technician can quickly check the current status of a system or view a log file of recent alert activity. By keeping constant watch on the system, the monitor can provide the first warning of a developing problem and help reduce thermal-generated support costs. A system fan, after all, is a lot less expensive to replace than a processor.

Not Just a Pretty Face

The Intel Active Monitor helps educate users about their systems. Its dynamic measurement of temperature and fan speed allows them to virtually look inside their systems. The System Info button lets the user identify processor type and speed, the desktop board model, chipset and memory information, and other details—including System Management BIOS information that cannot be obtained by simply searching through Control Panel. See Figure 3.



The Intel Active Monitor's GUI gives easy access to program options and threshold settings. Anyone can easily customize the alerts and their threshold values. The Intel Active Monitor, however, carefully sets the default values based on Intel-tested hardware specifications. It automatically detects the processor type and sets appropriate thresholds for that specific processor. System Integrators will know that the thresholds are correctly set for any system they produce based on a new Intel Desktop Board.

Where Can I Get It?

The best way to experience the benefits of the Intel Active Monitor is to try it yourself.

First, make sure that you have an Intel Desktop Board equipped with hardware sensors. These sensors are included on most boxed Intel Desktop Boards. Be sure to check your individual board's product spec for availability.

Second, install the software. You can find the utility on the CD that is included with all boxed Intel Desktop Boards. Or you can [download the latest version](#) from Intel's Web site. The application has been validated for use with Intel Desktop Boards based on the Intel 810, 815, and 850 chipsets.

Summary

Assure your end users of the effectiveness of your system design by providing the Intel Active Monitor on their desktop. It monitors system temperatures, fan speeds, and power supply voltages on all new Intel Desktop Boards and helps reduce thermal-related support costs. The Intel Active Monitor provides the user with important information at any time and peace of mind at all times.

More Info

The Intel Active Monitor is validated on Intel Desktop Boards based on Intel 810, 815, and 850 chipsets. For more information on features and limitations, please refer to the product documentation.

For more information on the features and benefits of buying Intel Desktop Boards, visit the [Desktop Boards area](#) of Intel's Developer Site.

For more information on other software products included on the Intel Desktop Board CD, visit the [Intel Boxed Desktop Boards](#) area of Intel's Channel Web Site.

Author Bio

Scott has a bachelor's degree in electrical engineering and an M.B.A. from Brigham Young University. In his three years with Intel, he has contributed to the Intel Desktop Board CD, Intel® Express Installer, Intel Active Monitor, and the Intel® AnswerExpressSM Support Suite. This is his first appearance in Intel Developer Update Magazine.

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